

## **AMENDMENTS TO THE SPECIFICATION**

On Page 1, please add the following paragraph after the title, and before the heading *TECHNICAL FIELD*:

### **CROSS-REFERENCE TO RELATED APPLICATION**

This application is based upon and claims the benefit of priority from Japanese Patent Application Nos. 2003-318847 and 2003-318862, both filed on September 10, 2003, the entire contents of which are incorporated herein by reference.

Please replace the Paragraph beginning on Line 20 of Page 6 and continuing onto page 7, Line 9 with the following paragraph rewritten in amendment format:

In a deployable reflector ~~of the invention recited in claim 1~~ according to a first aspect of the invention, a deployable truss structure renders an integrated system of cables in a deployed state by applying tension thereto. It includes a plurality of extendable structures, an extending mechanism, and a connectable structure. The plurality of extendable structures are connected to a plurality of outer circumference fixing points, respectively which are provided in an outer circumferential portion of a surface cable system at predetermined intervals in the circumferential direction of the surface cable system. The extendable structures are configured so as to be extendable in its axial direction. The extending mechanism applies tension to the surface cable system for deployment by extending the plurality of extendable structures and thereby moving the plurality of outer circumference fixing points in the outward direction of the surface cable system. The connectable structure bridges the plurality of extendable structures, and connects portions corresponding to nodes of a buckling mode with portions corresponding to antinodes thereof. The buckling

mode occurs in the extendable structures when tension is applied to the surface cable system.

Please replace the Paragraph beginning on Line 14 of Page 7 and continuing onto page 8, Line 1, with the following paragraph rewritten in amendment format:

In a deployable reflector ~~of the invention recited in claim 2~~ according to a second aspect of the invention, a foldable integrated system of cables is rendered in a deployable state when tension by expansion of a deployable truss structure is given, has a surface cable system composed of a cable connecting the apices of a plurality of triangles as connecting points, metallic meshes attached to the surface cable system and serving as an electromagnetic reflective surface, and a back cable system connected to the surface cable system by a plurality of tie cables. The surface cable system has a polyhedral surface structure made up of triangles in a deployed state. The surface cable system includes an internal surface cable system and a circumferential surface cable system that is connected to the outer circumference of the internal surface cable system. A cable used for the internal surface cable system is high in stiffness and small in the ratio of the length variation to the tension variation, and a cable used for the circumferential surface cable system is lower in stiffness and smaller in the ratio of the tension variation to the length variation than a cable used for the internal surface cable system.

Please replace the Paragraph beginning on Line 21 of Page 8, with the following paragraph rewritten in amendment format:

A deployable reflector ~~of the invention recited in claim 3 is a combination of~~ according to a third aspect of the invention combines the configuration ~~that in which~~ the connectable structure is added to the deployable truss structure (~~invention of claim 1~~), implemented according to the first aspect of the invention, and the configuration ~~that in which~~ the circumferential surface cable system that is more

elastic than the internal surface cable system is employed (~~invention of claim 2~~),  
according to the second aspect of the invention.

Please replace the Paragraph beginning on Line 25 of Page 8 and continuing onto page 9, Line 1, with the following paragraph rewritten in amendment format:

~~The invention of claim 4~~ A fourth aspect of the invention employs cables as the connectable structure in the deployable reflector ~~recited in claim 1~~ implemented according to the first aspect of the invention.

Please replace the Paragraph beginning on Line 2 of Page 9 with the following paragraph rewritten in amendment format:

~~The invention of claim 5 is provided with~~ A fifth aspect of the invention provides an accommodating unit that accommodates the cables in the deployable reflector ~~recited in claim 4~~ implemented according to the fourth aspect of the invention.

Please replace the Paragraph beginning on Line 4 of Page 9 with the following paragraph rewritten in amendment format:

~~The invention of claim 6 is such that, in~~ In a sixth aspect of the invention, the deployable reflector ~~recited in any one of claims 1 to 3~~ is implemented according to any one of the first, second and third aspects, and the deployable truss structure is provided between the surface cable system and the back cable system.

Please replace the Paragraph beginning on Line 7 of Page 9 with the following paragraph rewritten in amendment format:

~~The invention of claim 7 is such that, in~~ In a seventh aspect of the invention,  
the deployable reflector ~~recited in claim 1~~ is implemented according to the first  
aspect of the invention, a cable is used for the tie cables and the back cable system  
is lower in stiffness and smaller in the ratio of the tension variation to the length  
variation than a cable used for the surface cable system.

Please replace the Paragraph beginning on Line 11 of Page 9 with the  
following paragraph rewritten in amendment format:

~~The invention of claim 8 is such that, in~~ In an eighth aspect of the invention,  
the deployable reflector ~~recited in claim 1~~ is implemented according to the first  
aspect of the invention, the surface cable system is configured ~~so as~~ to assume an  
approximately parabolic surface when deployed.

Please replace the Paragraph beginning on Line 14 of Page 9 with the  
following paragraph rewritten in amendment format:

~~The invention of claim 9 is such that, in~~ In a ninth aspect of the invention, the  
deployable reflector ~~recited in claim 2 or 3,~~ is implemented according to any one of  
the second and third aspects of the invention, a cable is used for the tie cables and  
the back cable system is lower in stiffness and smaller in the ratio of the tension  
variation to the length variation than a cable used for the internal surface cable  
system.

Please replace the Paragraph beginning on Line 18 of Page 9 with the  
following paragraph rewritten in amendment format:

~~The invention of claim 10 is such that, in~~ In a tenth aspect of the invention, the deployable reflector ~~recited in claim 2 or 3~~ is implemented according to any one of the second and third aspects of the invention and the internal surface cable system is configured so as to assume an approximately parabolic surface when deployed.

On Page 9, please add the following paragraph after the heading *BRIEF DESCRIPTION OF THE DRAWINGS*:

The nature, principle, and utility of the invention will become more apparent from the following detailed description when read in conjunction with the accompanying drawings in which like parts are designated by identical reference numbers, in which:

On Page 21, please add the following paragraph beginning on Line 5 and before the heading *INDUSTRIAL APPLICABILITY*:

The invention is not limited to the above embodiments and various modifications may be made without departing from the spirit and scope of the invention. Any improvement may be made in part or all of the components.